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AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A transporting apparatus, installed in a given clean environment, for transporting a ~~large-sized thin~~ plate from a predetermined takeoff position to a processing chamber, comprising:

a pair of upright support members standing at a predetermined interval;

at least one horizontal support table liftably cantilevered on the pair of upright support members;

lift driving means for lifting the horizontal support table vertically; and

a robot placed on the horizontal support table and having horizontally rotating arms for taking up and transporting the ~~thin~~ plate.

2. (Currently amended) The transporting apparatus as claimed in claim 1, wherein the robot drives the horizontally rotating arms to take the ~~thin~~ plate one of from between the pair of upright support members and ~~or~~ back to between the pair of upright support members.

3. (Original) The transporting apparatus as claimed in claim 2, wherein the horizontal support table comprises tilt adjusting means for changing an angle of the robot placed on the horizontal support table with respect to a horizontal plane.

4. (Currently amended) The transporting apparatus as claimed in claim 3, further comprising:

deflection compensating means for compensating a deflected amount in a vertical direction of the rotating arms and a deflected amount of end effectors provided at respective ends of the rotating arms for taking up and transporting the ~~thin~~ plate.

5. (Currently amended) The transporting apparatus as claimed in claim 4, wherein the deflection compensating means compensates ~~both of~~ the deflected amounts of said rotating arms and said end effectors when the end effectors take up the ~~thin~~ plate.

6. (Currently amended) The transporting apparatus as claimed in claim 5, wherein the deflection compensating means comprises deflection storing means for storing deflected

amounts in the vertical direction at a plurality of predetermined measurement points involved in movement of a reference point on one of the rotating arms and ~~or~~ the end effectors, and[[,]]

wherein if ~~every time~~ the reference point moves to one of the measurement points, then the deflection compensating means reads a deflected amount corresponding to a present position from the deflection storing means to compensate the deflected amount.

7. (Currently amended) The transporting apparatus as claimed in claim 6, wherein the deflection storing means stores ~~both~~ a deflected amount due to a self weight and a deflected amount due to holding of the ~~thin~~ plate, and the deflected amount due to the self weight and the deflected amount due to holding of the ~~thin~~ plate are used by said deflection compensating means to change a compensation amount.

8. (Original) The transporting apparatus as claimed in claim 4, wherein the deflection compensating means comprises compensation controlling means for controlling the lift driving means to raise or lower the horizontal support table based on the deflected amount thereby to compensate deflection of one of the rotating arms and ~~or~~ the end effectors.

9. (Currently amended) The transporting apparatus as claimed in claim 4, wherein the deflection compensating means comprises compensation controlling means for controlling the tilt adjusting means to tilt the robot placed on the horizontal support table ~~so as~~ to one of:

raise the end effectors to compensate deflection of one of the rotating arms and the end effectors; ~~or~~

lower the end effectors to compensate deflection of one of the rotating arms and the end effectors; ~~or~~

raise the rotating arms ~~thereby~~ to compensate deflection of one of the rotating arms and the end effectors; and

lower the rotating arms to compensate deflection of one of the rotating arms and the end effectors ~~or the end effectors~~.

10. (Currently amended) The transporting apparatus as claimed in claim 4, wherein the deflection compensating means comprises compensation controlling means for controlling

the lift driving means and the tilt adjusting means ~~so as~~ to one of:

raise the horizontal support table to compensate deflection of one of the rotating arms and the end effectors; ~~or~~

lower the horizontal support table to compensate deflection of one of the rotating arms and the end effectors; ~~and/or~~

changing the angle of the robot with respect to a horizontal plane by controlling ~~control~~ the tilt adjusting means ~~to performed tilting~~ based on the deflected amount ~~thereby~~ to compensate deflection of the rotating arms or the end effectors.

11. (Currently amended) The transporting apparatus as claimed in claim 1, further comprising:

placing position detecting means including a placing position sensor for detecting passage of the ~~thin~~ plate held by the end effectors; ~~and~~

calculating means for calculating a displaced amount of the placing position from the reference point based on a detected signal of the placing position sensor; and

displacement compensating means for compensating the displaced amount of the placing position based on the calculated displaced amount.

12. (Original) The transporting apparatus as claimed in claim 11, wherein the placing position detecting means calculates a displaced amount in an X axis direction, a displaced amount in a Y axis direction and a displaced amount in a rotational direction from the predetermined reference point and the displacement compensating means compensates the displaced amounts by moving the end effectors in such a direction that the calculated displaced amounts are cancelled.

13. (Currently amended) The transporting apparatus as claimed in claim 1, further comprising:

moving means for moving the pair of upright support members horizontally.

14. (Currently amended) The transporting apparatus as claimed in claim 1, further comprising:

a beam for fixedly coupling top portions of the pair of upright support members while the pair of upright support members is held in parallel.

15. (Currently amended) A transporting control method of a transporting apparatus, installed in a predetermined clean environment and having rotating arms and end effectors, for transporting a ~~large-sized thin~~ plate from a predetermined takeoff position to a processing chamber, comprising ~~the steps of: (a)~~

based on position data of accessed position of the rotating arms and the end effectors, calculating a moving amount in a horizontal direction, a moving amount in a vertical direction and driving data of the rotating arms and the end effectors; ~~(b)~~

moving a robot based on the moving amount in the horizontal direction and the moving amount in the vertical direction and driving the rotating arms and the end effectors based on the driving data; ~~(c)~~

reading from storing means deflection data of the rotating arms and the end effectors which are extended; ~~(d)~~

calculating compensation data for compensating a deflected amount based on the deflection data; and ~~(e)~~

compensating the deflected amount ~~controlling to adjust the moving amount in the vertical direction~~ based on the compensation data ~~thereby to compensate the deflected amount~~.

16. (Currently amended) The transporting control method as claimed in claim 15, wherein said compensating the deflected amount comprises ~~the step (e) being replaced with the step (f) of~~ adjusting a tilt angle of the robot based on the compensation data thereby to compensate the deflected amount.

17. (Currently amended) The transporting control method as claimed in claim 15, wherein said compensating the deflected amount comprises ~~the step (e) being replaced with the step (g) of~~ adjusting at least one of the moving amount in the vertical direction and ~~and/or~~ the tilt angle of the robot based on the compensation data thereby to compensate the deflected amount.

18. (Currently amended) The transporting control method as claimed in claim 15, wherein the deflection data read in said reading from said storing means ~~the step (e)~~ includes deflection data at a plurality of moving points the rotating arms and the end effectors and the calculated compensation data ~~calculated in the step (d)~~ includes compensation data at each of the moving points.

19. (Currently amended) The transporting control method as claimed in claim 18, wherein in said reading from said storing means ~~the step (e)~~, the deflection data read from the storing means depends on whether the ~~thin~~ plate is held ~~or not~~.

20. (Currently amended) A transporting control method of a transporting apparatus, installed in a predetermined clean environment and having rotating arms and end effectors, for transporting a plate from a predetermined takeoff position to a processing chamber, comprising

based on position data of accessed position of the rotating arms and the end effectors, calculating a moving amount in a horizontal direction, a moving amount in a vertical direction and driving data of the rotating arms and the end effectors;

moving a robot based on the moving amount in the horizontal direction and the moving amount in the vertical direction and driving the rotating arms and the end effectors based on the driving data;

reading from storing means deflection data of the rotating arms and the end effectors which are extended, and compensation data calculated and stored in advance based on the deflected amount; and

compensating the deflected amount by adjusting the moving amount in the vertical direction based on the read compensation data

~~The transporting control method as claimed in claim 15, wherein in the step (c), read from the storing means is the compensation data calculated and stored in advance based on the deflected amount; calculating of the compensation data in the step (d) is not performed; and processing in the step (e) is performed based on the read compensation data.~~

21. (Currently amended) The transporting control method as claimed in claim 15, further comprising ~~the steps of: (h)~~

detecting a placing position of the ~~thin~~ plate held by the end effectors; ~~(i)~~

comparing the placing position and a predetermined reference placing position to calculate a displaced amount; and ~~(j)~~

performing operational control to compensate the displaced amount.

22. (Currently amended) The transporting control method as claimed in claim 21, wherein the displaced amount in said comparing the placing position and said predetermined reference placing position ~~the step (i)~~ includes a displaced amount in an X axis direction, a displaced amount in a Y axis direction and a displaced amount in a rotational axis direction from the reference placing position, and

wherein the operational control in said performing operational control ~~the step (j)~~ is performed to compensate each of the displaced amounts in said comparing the placing position and said predetermined reference placing position ~~the step (i)~~.

23. (New) The transporting apparatus as claimed in claim 1, wherein the robot comprises a body which is horizontally rotatably fixed on said horizontal support table, said horizontally rotating arms including an end which is rotatably fixed to said body of said robot.